

REMARKS

Claim 1 has been amended to specify that the first reader of the system includes a camera and a laser for determining physical characteristics of the tire in addition to reading a reference position on the tire and for supplying the physical characteristics and reference position to a control unit. Claim 1 has been further amended to specify that the positioning mechanism includes a rotational device which rotates the tire for correct placement and alignment of the tire with respect to the laser applicator based upon the information received from the first reader for applying the indicia on the tire at a specific location by the laser applicator.

Claim 1 was initially rejected, together with dependent claims 2-12, as being unpatentable over Baker (5,603,796) in view of Glaser et al. (5,325,582) in view of Gappa (4,304,981).

Baker was cited to show that the laser marking of vehicle tires is well-known with which Applicant agrees. However, the Office Action admits that Baker does not describe a first reader or a positioning mechanism included in claim 1.

Glaser was cited to show that it was known to have plural stations, such as barcode or inscription inspection in a visual inspection station and a laser etching station. Initially it is pointed out that Glaser is concerned with the assembly and repair of printed wiring circuit boards which in no way relates to a system for marking of vehicle tires.

Gappa was cited to show that it is well-known to have an inspection station and a subsequent marking station. Gappa refers to moving panels and strips of sheet steel and is in no way related to the marking of tires.

There is nothing in Baker, Glaser and Gappa which shows a first reader having a camera and a laser which determines physical characteristics of a tire and which reads a reference position on the tire and supplies the read tire characteristics and reference position to a control unit. Furthermore, none of these three references show a rotational device in the overall system which rotates a tire (or any workpiece for that matter), so that the tire is aligned with the laser applicator based upon the information received from the first reader, namely, the physical characteristics of the tire and a reference position on the tire. None of the

three cited references even disclose individually these particular features or components, much less suggest combining such components in the manner set forth in amended claim 1. None of the three references suggest in any manner combining the individual features pointed out by the Examiner, namely, the laser marking of a vehicle tire, plural stations and a marking station, which even if combined would disclose the particular system of amended claim 1. All three of the references relate to different systems, only one of which pertains to the marking of the tire.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestions or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestions to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. M.P.E.P. § 2142.

The Applicant further submits that there is no suggestion or motivation for combining the three references as argued by the Examiner. Without such suggestion or motivation in the cited references, the combination of the references cannot be said to be obvious. The Patent and Trademark Office Board of Patent Appeal and Interferences stated "presuming arguendo that the references show the elements or concepts urged by the Examiner, the Examiner has presented no line of reasoning, and we know of none, as to why one skilled in the art when viewing only the collective teachings of the references would have found it obvious to selectively pick and choose various elements and/or concepts from the several references relied on to arrive at the claimed invention. In the instant application, it is respectfully submitted that the Examiner has done little more than cite references to show that one or more elements or some combinations thereof, when each is viewed in a vacuum, is known."

The claimed invention is clearly directed to a combination of elements or devices. That is to say, Applicants do not claim that they have invented one or more new elements or devices but has presented claims to a new combination of elements. To support the conclusion of the claimed combination is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed combination where the Examiner must present a convincing line of reasoning as to why the artist would have found the claimed invention to have been obvious in light of the teaching of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (1985).

With the above directives, consideration must be given as to whether the combination of the references in the manner set forth in the Office Action is proper to render the applicant's invention obvious.

The CAFC, in the case of *In re Fine*, 5 USPQ 2nd 1596 (1988) stated beginning at page 1599 that:

Obviousness is tested by "the combined teaching of the references would have suggested to those of ordinary skill in the art." In re Keller, 642 F.2nd 413, 425, 208 USPQ 871, 881 (CCPA 1981). "But it cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." ACS Hospital Sys., 732 F.2d at 1577, 221 USPQ at 933. "Teachings of references can be combined only if there is some suggestion or incentive to do so." Id. Here, the prior art contains none.

As such, the invention is not suggested by the combination of prior art references, as none of the references teach or suggest the use of a first reader which includes a camera and a laser which determines physical characteristics of the tire, as well as reading a reference position on the tire, and that it uses these readings in a positioning mechanism which includes a rotational device for rotating the tire for correct placement and alignment of the tire with respect to the laser applicator.

As indicated in the Office Action, Baker only shows the laser marking of vehicle tires, Glaser shows the use of plural stations including a visual inspection station and laser edging station, and Gappa shows the use of a subsequent marking station.

Burke (4,564,737) was cited to show the use of reading a workpiece which is rotated for subsequent processing. However, Burke is concerned with rotating the workpiece at a predetermined constant speed so that a laser beam forms a series of dots on the tire for forming a tire pattern. It no way suggests the use of a rotational device for rotating a tire for correct placement and alignment for subsequent application of information thereon by a laser applicator. Again, Burke merely constantly rotates the device for continually marking a series of dots thereon and not for positioning the tire for subsequent application of indicia at a specific location.

A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. The degree of teaching away will of course depend on the particular facts; in general, a reference will teach away if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant. See *United States v. Adams*, 383 U.S. 39, 52, 148 USPQ 479, 484 (1966) ("known disadvantages in old devices which would naturally discourage the search for new inventions may be taken into account in determining obviousness"). *In re Gurley*, 31 USPQ 2d 1130, 1131 (Fed. Cir. 1994).

In addition, the Glaser and Gappa references are non-analogous art and it is respectfully submitted that a person of ordinary skill in the art seeking to solve a problem of improving the marking of tires would reasonably be expected or motivated to look in the printed circuit board art (Glaser) or the steel sheet art (Gappa). "The combination of elements from non-analogous sources, in a manner that reconstructs the Applicant's invention only with the benefit of hindsight, is insufficient to present a *prima facie* case of obviousness. There must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination." *In re Oetiker*, 24 USPQ 2d 1443 (Fed. Cir. 1992).

The Applicant respectfully submits that the basic criteria for establishing a *prima facie* case of obviousness is not being met by the Examiner. Specifically, the Examiner has not pointed to any motivation or suggestion in the prior art references themselves that would lead one of ordinary skill in the art to make the combination submitted by the Examiner. “The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.” *In re Fritch*, 23 USPQ 2d 1780 (Fed. Cir. 1992). The Applicant submits that the requisite motivation was not provided in the references and the combination does not render the claimed invention obvious. In addition, and believed most important, the third criteria is not met because the combination of references does not disclose the particular system of amended claim 1, nor the method of amended claim 13.

The Examiner bears the burden of establishing a *prima facie* case of obviousness.... Only if this burden is met does the burden of coming forward with rebuttal argument or evidence shift to the applicant... When the references cited by the Examiner fail to establish a *prima facie* case of obviousness, the rejection is improper and will be overturned. *In re Deuel*, 34 USPQ 2d 1210, 1214 (Fed. Cir. 1995).

In determining obviousness, a court must (1) determine the scope and content of the prior art; (2) ascertain the differences between the prior art and the claimed invention; and (3) resolve the level of ordinary skill in the pertinent art. Secondary considerations such as commercial success, long felt but unsolved need, and failure of others are also considered. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

Thus, it is respectfully submitted that even if the individual features of the three cited references, Baker, Glasér and Gappa were combined, it still would not show the particular system now set forth in claim 1. Again, there is no first reader which includes a camera and a laser for determining physical characteristics of the tire in addition to reading a reference position in the tire, together with a positioning mechanism which includes a rotary device for rotating the tire for

correct placement and alignment of the tire with respect to the laser applicator based upon the information received from the first reader and then applying indicia at a specific location on the tire by the laser applicator. Accordingly, it is respectfully requested that claim 1, together with claims 2-12 dependent therefrom are entitled to allowance and action to that effect is respectfully requested.

Method claim 13 has been amended to specify that the step of reading information contained on the tire includes reading indicia molded into the tire or a bar code strip and reading physical characteristics of the tire at a first station, which as discussed above with respect to claim 1 is not shown or suggested by any of the three cited references Baker, Glaser and Gappa. Claim 13 furthermore includes the step of coordinating the position of a laser marking device and the tire in response to the information on the tire and physical characteristics of the tire read at the first station, and that this information is then used for step (e), the laser engraving of certain information at a specific location on the tire at a second station. Again, as discussed above, the three cited references do not disclose in any manner this particular sequence of steps for achieving the results of the present application.

Again, as discussed above, Burke is concerned only with rotating a workpiece at a constant speed for marking a tread pattern thereon by a laser beam. It does not disclose in any manner the step of element d), namely the coordinating the position of the laser marking device in response to the information on the tire and to the physical characteristics of the tire. Again, none of the cited references disclose where any reader measures the physical characteristics of the tire for use in the subsequent positioning and marking of the tire.

Admittedly, some of the remaining references cited by the Examiner, Smart (US 2004/0188399), Hiramatsu (US 2005/0263498), Grant (5,226,361), and Burke (4,564,737) do disclose some of the elements and method steps set forth in dependent claims 2-12 and 14-20. However, even when these additional features are combined with those of the three main cited references Baker, Glaser and Gappa they do not disclose the system of claim 1 or the method of claim 13 (as now amended) for the reasons discussed above.

In view of the foregoing, the Applicant respectfully requests reconsideration of the claims and most earnestly solicits the issuance of a formal notice of allowability for the claims. Please call the undersigned attorney if any questions remain after this amendment.

Respectfully submitted this 9TH day of APRIL, 2010.

SAND & SEBOLT



By: Michael Sand
Reg. No. 26503

Aegis Tower, Suite 1100
4940 Munson St. NW
Canton, Ohio 44718-2569
Telephone: (330) 244-1174
Facsimile: (330) 244-1173
MS/kab
Attorney Docket: P03027US2A